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<223> PBW-BTR P2U primer

<400> 12
agtgcgagtg ctttgaatct gtga 24

<210> 13
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> PBW-BTR P5U primer

<400> 13
gtctcttctc accgtcactg tcact 25

<210> 14
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> PBW-BTR P6D primer

<400> 14
gcatgctggc agtaggttgt atc 23

<210> 15
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> (AUAP) primer

<400> 15
ggccacgcgt cgactagtac 20

<210> 16
<211> 37
<212> DNA
<213> Artificial sequence

<220>

<223> (AP) primer

<400> 16
ggccacgcgt cgactagtac ttttttttt ttttttt 37

<210> 17
<211> 1715
<212> PRT
<213> B. mori

<400> 17
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1 5 10 15
Glu Thr Val Leu Ala Gln Glu Arg Cys Gly Phe Met Val Ala Ile Pro
20 25 30
Arg Pro Pro Arg Pro Asp Leu Pro Glu Leu Asp Phe Glu Gly Gln Thr
35 40 45
Trp Ser Gln Arg Pro Leu Ile Pro Ala Ala Asp Arg Glu Asp Val Cys
50 55 60
Met Asp Gly Tyr His Ala Met Thr Pro Thr Tyr Gly Thr Gln Ile Ile
65 70 75 80
Tyr Met Glu Glu Glu Ile Glu Gly Glu Val Pro Ile Ala Lys Leu Asn
85 90 95
Tyr Arg Gly Pro Asn Val Pro Tyr Ile Glu Pro Ala Phe Leu Ser Gly
100 105 110
Ser Phe Asn Leu Leu Val Pro Val Ile Arg Arg Ile Pro Asp Ser Asn
115 120 125
Gly Glu Trp His Leu Ile Ile Thr Gln Arg Gln Asp Tyr Glu Thr Pro
130 135 140
Gly Met Gln Gln Tyr Val Phe Asn Ile Arg Ile Asp Gly Glu Thr Leu
145 150 155 160
Val Ala Gly Val Ser Leu Leu Ile Val Asn Ile Asp Asp Asn Ala Pro
165 170 175
Ile Ile Gln Ala Leu Glu Pro Cys Gln Val Asp Glu Leu Gly Glu Ala
180 185 190
Arg Leu Thr Glu Cys Val Tyr Val Val Thr Asp Ala Asp Gly Arg Ile
195 200 205
Ser Thr Gln Phe Met Gln Phe Arg Ile Asp Ser Asp Arg Gly Asp Asp
210 215 220
Lys Ile Phe Tyr Ile Gln Gly Ala Asn Ile Pro Gly Glu Trp Ile Arg
225 230 235 240
Met Thr Met Thr Val Gly Ile Asn Glu Pro Leu Asn Phe Glu Thr Asn
245 250 255
Pro Leu His Ile Phe Ser Val Thr Ala Leu Asp Ser Leu Pro Asn Thr
260 265 270
His Thr Val Thr Leu Met Val Gln Val Glu Asn Val Glu His Arg Pro
275 280 285
Pro Arg Trp Val Glu Ile Phe Ala Val Gln Gln Phe Asp Glu Lys Thr
290 295 300
Ala Gln Ser Phe Pro Val Arg Ala Ile Asp Gly Asp Thr Gly Ile Asn
305 310 315 320
Lys Pro Ile His Tyr Arg Leu Glu Thr Ala Glu Glu Asp Thr Phe Phe
325 330 335
His Ile Arg Thr Ile Glu Gly Gly Arg Ser Gly Ala Ile Leu Tyr Val
340 345 350
Asp Pro Ile Asp Arg Asp Thr Leu Gln Arg Glu Val Phe Gln Leu Ser
355 360 365
Ile Ile Ala Tyr Lys Tyr Asp Asn Glu Ser Ser Ala Thr Ala Ala Asn
370 375 380
Val Val Ile Ile Val Asn Asp Ile Asn Asp Gln Arg Pro Glu Pro Leu

385 390 395 400
Phe Lys Glu Tyr Arg Leu Asn Ile Met Glu Glu Thr Ala Leu Thr Leu
405 410 415
Asn Phe Asp Gln Glu Phe Gly Phe His Asp Arg Asp Leu Gly Gln Asn
420 425 430
Ala Gln Tyr Thr Val Arg Leu Glu Ser Asp Tyr Pro Ala Asp Ala Ala
435 440 445
Lys Ala Phe Tyr Ile Ala Pro Glu Val Gly Tyr Gln Arg Gln Thr Phe
450 455 460
Ile Met Gly Thr Ala Asn His Lys Met Leu Asp Tyr Glu Val Pro Glu
465 470 475 480
Phe Gln Arg Ile Arg Leu Arg Val Ile Ala Thr Asp Met Asp Asn Glu
485 490 495
Glu His Val Gly Val Ala Tyr Val Tyr Ile Asn Leu Ile Asn Trp Asn
500 505 510
Asp Glu Glu Pro Ile Phe Glu His Ser Val Gln Asn Val Ser Phe Lys
515 520 525
Glu Thr Glu Gly Lys Gly Phe Phe Val Ala Asn Val Arg Ala His Asp
530 535 540
Arg Asp Ile Asp Asp Arg Val Glu His Thr Leu Met Gly Asn Ala Asn
545 550 555 560
Asn Tyr Leu Ser Ile Asp Lys Asp Thr Gly Asp Ile His Val Thr Gln
565 570 575
Asp Asp Phe Phe Asp Tyr His Arg Gln Ser Glu Leu Phe Val Gln Val
580 585 590
Arg Ala Asp Asp Thr Leu Gly Glu Pro Phe His Thr Ala Thr Ser Gln
595 600 605
Leu Leu Ile His Glu Glu Asp Ile Asn Asn Thr Pro Pro Thr Leu Arg
610 615 620
Leu Pro Arg Gly Ser Pro Asn Val Glu Glu Asn Val Pro Glu Gly Tyr
625 630 635 640
Ile Ile Thr Ser Glu Ile Arg Ala Thr Asp Pro Asp Thr Thr Ala Glu
645 650 655
Leu Arg Phe Glu Ile Asp Trp Thr Thr Ser Tyr Ala Thr Lys Gln Gly
660 665 670
Arg Glu Ala Asn Pro Ile Glu Phe His Asn Cys Val Glu Ile Glu Thr
675 680 685
Ile Tyr Pro Ala Ile Asn Asn Arg Gly Ser Ala Ile Gly Arg Leu Val
690 695 700
Val Lys Lys Ile Arg Glu Asn Val Thr Ile Asp Tyr Glu Glu Phe Glu
705 710 715 720
Met Leu Tyr Leu Thr Val Arg Val Arg Asp Leu Asn Thr Val Ile Gly
725 730 735
Asp Asp Tyr Asp Glu Ser Thr Phe Thr Ile Thr Ile Ile Asp Met Asn
740 745 750
Asp Asn Pro Pro Ile Trp Val Pro Gly Thr Leu Glu Gln Ser Leu Arg
755 760 765
Val Arg Glu Met Ser Asp Ala Gly Val Val Ile Gly Thr Leu Thr Ala
770 775 780
Thr Asp Ile Asp Gly Pro Leu Tyr Asn Gln Val Arg Tyr Thr Met Lys
785 790 795 800
Ala Asn Glu Gly Thr Pro Glu Asn Leu Leu Met Glx Asp Phe Tyr Thr
805 810 815
Gly Gln Ile Thr Val Lys Thr Ser Gly Ala Ile Asp Ala Asp Val Pro
820 825 830
Arg Arg Tyr Asn Leu Tyr Tyr Thr Val Val Ala Thr Asp Arg Cys Tyr
835 840 845
Ala Glu Asp Pro Asp Asp Cys Pro Asp Asp Pro Thr Tyr Trp Glu Thr
850 855 860
Pro Gly Gln Val Val Ile Gln Ile Ile Asp Thr Asn Asn Lys Ile Pro
865 870 875 880

Gln Pro Glu Thr Asp Gln Phe Lys Ala Val Val Tyr Ile Tyr Glu Asp
885 890 895
Ala Val Ser Gly Asp Glu Val Val Lys Val Ile Gly Ser Asp Leu Asp
900 905 910
Arg Asp Asp Ile Tyr His Thr Ile Arg Tyr Gln Ile Asn Tyr Ala Val
915 920 925
Asn Pro Arg Leu Arg Asp Phe Phe Ala Val Asp Pro Asp Thr Gly Arg
930 935 940
Val Tyr Val Tyr Tyr Thr Thr Asp Glu Val Leu Asp Arg Asp Gly Asp
945 950 955 960
Glu Pro Gln His Arg Ile Phe Phe Asn Leu Ile Asp Asn Phe Phe Gln
965 970 975
Gln Gly Asp Gly Asn Arg Asn Gln Asn Asp Ala Glu Val Leu Val Val
980 985 990
Leu Leu Asp Val Asn Asp Asn Ala Pro Glu Leu Pro Glu Pro Asp Glu
995 1000 1005
Leu Ser Trp Ser Val Ser Glu Ser Leu Thr Lys Gly Thr Arg Leu Gln
1010 1015 1020
Pro His Ile Tyr Ala Pro Asp Arg Asp Glu Pro Asp Thr Asp Asn Ser
1025 1030 1035 1040
Arg Val Gly Tyr Ala Ile Ile Ser Leu Thr Ile Ala Asn Arg Glu Ile
1045 1050 1055
Glu Val Pro Glu Leu Phe Thr Met Ile Gln Ile Gln Asn Val Thr Gly
1060 1065 1070
Glu Leu Glu Thr Ala Met Asp Leu Arg Gly Tyr Trp Gly Thr Tyr Ala
1075 1080 1085
Ile His Ile Lys Ala Tyr Asp His Gly Ile Pro Gln Gln Met Ser Asn
1090 1095 1100
Glu Thr Tyr Glu Leu Val Ile Arg Pro Tyr Asn Phe His Ala Pro Val
1105 1110 1115 1120
Phe Val Phe Pro Lys His Gly Ala Thr Leu Arg Leu Ala Arg Glu Arg
1125 1130 1135
Ala Val Val Asn Gly Leu Leu Ala Thr Val Asp Gly Glu Phe Leu Asn
1140 1145 1150
Arg Ile Val Ala Thr Asp Glu Asp Gly Leu His Ala Gly Gln Val Ala
1155 1160 1165
Phe Glu Val Val Gly Asp Thr Glu Ala Val Asp Tyr Phe His Ile Val
1170 1175 1180
Asn Asp Gly Glu Asn Ser Gly Thr Leu Met Leu Lys Gln Leu Phe Pro
1185 1190 1195 1200
Glu Asp Ile Arg Glu Phe Glu Val Thr Ile Arg Ala Thr Asp Gly Gly
1205 1210 1215
Thr Glu Pro Arg Pro Leu Ser Thr Asp Cys Thr Phe Ser Val Val Phe
1220 1225 1230
Val Pro Ile Gln Gly Glu Pro Ile Phe Pro Thr Ser Thr His Thr Val
1235 1240 1245
Ala Phe Ile Glu Lys Glu Ala Gly Leu Leu Glu Arg His Glu Leu Pro
1250 1255 1260
Arg Ala Glu Asp Arg Lys Asn His Leu Cys Ser Asp Asp Cys His Asn
1265 1270 1275 1280
Ile Tyr Tyr Arg Ile Ile Asp Gly Asn Asn Asp Gly His Phe Gly Leu
1285 1290 1295
Asp Glu Thr Thr Asn Val Leu Phe Leu Val Lys Glu Leu Asp Arg Ser
1300 1305 1310
Val Ser Glu Thr Tyr Thr Leu Thr Ile Ala Ala Ser Asn Ser Pro Thr
1315 1320 1325
Gly Gly Ile Ala Leu Thr Ser Thr Ile Thr Ile Thr Val Asn Val Arg
1330 1335 1340
Glu Ala Asp Pro Gln Pro Tyr Phe Val Arg Asp Leu Tyr Thr Ala Gly
1345 1350 1355 1360
Ile Ser Thr Ser Asp Ser Ile Asn Arg Glu Leu Leu Ile Leu Gln Ala

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                1365                1370                1375
Thr His Ser Glu Asn Ala Pro Ile Ile Tyr Thr Ile Asp Trp Ser Thr
            1380                1385                1390
Met Val Thr Asp Pro Thr Leu Ala Ser Val Arg Glu Thr Ala Phe Ile
        1395                1400                1405
Leu Asn Pro His Thr Gly Val Leu Thr Leu Asn Ile Gln Pro Thr Ala
    1410                1415                1420
Ser Met His Gly Met Phe Glu Phe Gln Val Val Ala Thr Asp Pro Ala
1425                1430                1435                1440
Gly Tyr Ser Asp Arg Ala Asn Val Lys Ile Tyr Leu Ile Ser Thr Arg
                1445                1450                1455
Asn Arg Val Phe Phe Leu Phe Val Asn Thr Leu Glu Gln Val Glu Gln
            1460                1465                1470
Asn Thr Asp Phe Ile Ala Gln Thr Phe Ser Ala Gly Phe Glu Met Thr
        1475                1480                1485
Cys Asn Ile Asp Gln Val Val Pro Ala Thr Asp Ala Ser Gly Val Ile
    1490                1495                1500
Met Asn Gly Ile Thr Glu Val Arg Gly His Phe Ile Arg Asp Asn Val
1505                1510                1515                1520
Pro Val Pro Ala Asp Glu Ile Glu Thr Leu Arg Gly Asp Met Val Leu
                1525                1530                1535
Leu Thr Ala Ile Gln Ser Thr Leu Ala Thr Arg Leu Leu Val Leu Arg
            1540                1545                1550
Asp Leu Phe Thr Asp Thr Ser Pro Ala Pro Asp Ala Gly Ser Ala Ala
        1555                1560                1565
Val Leu Tyr Ala Leu Ala Val Leu Ser Ala Leu Leu Ala Ala Leu Cys
    1570                1575                1580
Leu Leu Leu Leu Val Ile Phe Ile Ile Arg Thr Lys Lys Leu Asn Arg
1585                1590                1595                1600
Arg Leu Glu Ala Leu Thr Val Lys Lys Tyr Gly Ser Val Asp Ser Gly
                1605                1610                1615
Leu Asn Arg Val Gly Ile Ala Ala Pro Gly Thr Asn Lys His Ala Val
            1620                1625                1630
Glu Gly Ser Asn Pro Ile Trp Asn Glu Thr Ile Lys Ala Pro Asp Phe
        1635                1640                1645
Asp Ser Met Ser Asp Ala Ser Asn Asp Ser Asp Leu Ile Gly Ile Glu
    1650                1655                1660
Asp Leu Pro His Phe Gly Glu Asn Asn Tyr Phe Pro Arg Asp Val Asp
1665                1670                1675                1680
Glu Phe Lys Thr Asp Lys Pro Glu Asp Ile Val Ala Thr His Asn Asn
                1685                1690                1695
Asn Phe Gly Phe Lys Ser Thr Pro Phe Ser Pro Glu Phe Ala Asn Gln
            1700                1705                1710
Phe Gln Lys
        1715
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<210> 18
<211> 1717
<212> PRT
<213> Tobacco hornworm

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<400> 18
Met Ala Val Asp Val Arg Ile Ala Ala Phe Leu Leu Val Phe Ile Ala
 1               5                  10                  15
Pro Ala Val Leu Ala Gln Glu Arg Cys Gly Tyr Met Thr Ala Ile Pro
            20                  25                  30
Arg Leu Pro Arg Pro Asp Asn Leu Pro Val Leu Asn Phe Glu Gly Gln
        35                  40                  45
Thr Trp Ser Gln Arg Pro Leu Leu Pro Ala Pro Glu Arg Asp Asp Leu
    50                  55                  60
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Cys Met Asp Ala Tyr His Val Ile Thr Ala Asn Leu Gly Thr Gln Val
65                  70                  75                  80
Ile Tyr Met Asp Glu Glu Ile Glu Asp Glu Ile Thr Ile Ala Ile Leu
                85                  90                  95
Asn Tyr Asn Gly Pro Ser Thr Pro Phe Ile Glu Leu Pro Phe Leu Ser
            100                 105                 110
Gly Ser Tyr Asn Leu Leu Met Pro Val Ile Arg Arg Val Asp Asn Gly
        115                 120                 125
Glu Trp His Leu Ile Ile Thr Gln Arg Gln His Tyr Glu Leu Pro Gly
    130                 135                 140
Met Gln Gln Tyr Met Phe Asn Val Arg Val Asp Gly Gln Ser Leu Val
145                 150                 155                 160
Ala Gly Val Ser Leu Ala Ile Val Asn Ile Asp Asp Asn Ala Pro Ile
                165                 170                 175
Ile Gln Asn Phe Glu Pro Cys Arg Val Pro Glu Leu Gly Glu Pro Gly
            180                 185                 190
Leu Thr Glu Cys Thr Tyr Gln Val Ser Asp Ala Asp Gly Arg Ile Ser
        195                 200                 205
Thr Glu Phe Met Thr Phe Arg Ile Asp Ser Val Arg Gly Asp Glu Glu
    210                 215                 220
Thr Phe Tyr Ile Glu Arg Thr Asn Ile Pro Asn Gln Trp Met Trp Leu
225                 230                 235                 240
Asn Met Thr Ile Gly Val Asn Thr Ser Leu Asn Phe Val Thr Ser Pro
                245                 250                 255
Leu His Ile Phe Ser Val Thr Ala Leu Asp Ser Leu Pro Asn Thr His
            260                 265                 270
Thr Val Thr Met Met Val Gln Val Ala Asn Val Asn Ser Arg Pro Pro
        275                 280                 285
Arg Trp Leu Glu Ile Phe Ala Val Gln Gln Phe Glu Glu Lys Ser Tyr
    290                 295                 300
Gln Asn Phe Thr Val Arg Ala Ile Asp Gly Asp Thr Glu Ile Asn Met
305                 310                 315                 320
Pro Ile Asn Tyr Arg Leu Ile Thr Asn Glu Glu Asp Thr Phe Phe Ser
                325                 330                 335
Ile Glu Ala Leu Pro Gly Gly Lys Ser Gly Ala Val Phe Leu Val Ser
            340                 345                 350
Pro Ile Asp Arg Asp Thr Leu Gln Arg Glu Val Phe Pro Leu Thr Ile
        355                 360                 365
Val Ala Tyr Lys Tyr Asp Glu Glu Ala Phe Ser Thr Ser Thr Asn Val
    370                 375                 380
Val Ile Ile Val Thr Asp Ile Asn Asp Gln Arg Pro Glu Pro Ile His
385                 390                 395                 400
Lys Glu Tyr Arg Leu Ala Ile Met Glu Glu Thr Pro Leu Thr Leu Asn
                405                 410                 415
Phe Asp Lys Glu Phe Gly Phe His Asp Lys Asp Leu Gly Gln Asn Ala
            420                 425                 430
Gln Tyr Thr Val Arg Leu Glu Ser Val Asp Pro Pro Gly Ala Ala Glu
        435                 440                 445
Ala Phe Tyr Ile Ala Pro Glu Val Gly Tyr Gln Arg Gln Thr Phe Ile
    450                 455                 460
Met Gly Thr Leu Asn His Ser Met Leu Asp Tyr Glu Val Pro Glu Phe
465                 470                 475                 480
Gln Ser Ile Thr Ile Arg Val Val Ala Thr Asp Asn Asn Asp Thr Arg
                485                 490                 495
His Val Gly Val Ala Leu Val His Ile Asp Leu Ile Asn Trp Asn Asp
            500                 505                 510
Glu Gln Pro Ile Phe Glu His Ala Val Gln Thr Val Thr Phe Asp Glu
        515                 520                 525
Thr Glu Gly Glu Gly Phe Phe Val Ala Lys Ala Val Ala His Asp Arg
    530                 535                 540
Asp Ile Gly Asp Val Val Glu His Thr Leu Leu Gly Asn Ala Val Asn
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545                 550                 555                 560
Phe Leu Thr Ile Asp Lys Leu Thr Gly Asp Ile Arg Val Ser Ala Asn
                565                 570                 575
Asp Ser Phe Asn Tyr His Arg Glu Ser Glu Leu Phe Val Gln Val Arg
            580                 585                 590
Ala Thr Asp Thr Leu Gly Glu Pro Phe His Thr Ala Thr Ser Gln Leu
        595                 600                 605
Val Ile Arg Leu Asn Asp Ile Asn Asn Thr Pro Pro Thr Leu Arg Leu
    610                 615                 620
Pro Arg Gly Ser Pro Gln Val Glu Glu Asn Val Pro Asp Gly His Val
625                 630                 635                 640
Ile Thr Gln Glu Leu Arg Ala Thr Asp Pro Asp Thr Thr Ala Asp Leu
                645                 650                 655
Arg Phe Glu Ile Asn Trp Asp Thr Ser Phe Ala Thr Lys Gln Gly Arg
            660                 665                 670
Gln Ala Asn Pro Asp Glu Phe Arg Asn Cys Val Glu Ile Glu Thr Ile
        675                 680                 685
Phe Pro Glu Ile Asn Asn Arg Gly Leu Ala Ile Gly Arg Val Val Ala
    690                 695                 700
Arg Glu Ile Arg His Asn Val Thr Ile Asp Tyr Glu Glu Phe Glu Val
705                 710                 715                 720
Leu Ser Leu Thr Val Arg Val Arg Asp Leu Asn Thr Val Tyr Gly Asp
                725                 730                 735
Asp Tyr Asp Glu Ser Met Leu Thr Ile Thr Ile Ile Asp Met Asn Asp
            740                 745                 750
Asn Ala Pro Val Trp Val Glu Gly Thr Leu Glu Gln Asn Phe Arg Val
        755                 760                 765
Arg Glu Met Ser Ala Gly Gly Leu Val Val Gly Ser Val Arg Ala Asp
    770                 775                 780
Asp Ile Asp Gly Pro Leu Tyr Asn Gln Val Arg Tyr Thr Ile Phe Pro
785                 790                 795                 800
Arg Glu Asp Thr Asp Lys Asp Leu Ile Met Ile Asp Phe Leu Thr Gly
                805                 810                 815
Gln Ile Ser Val Asn Thr Ser Gly Ala Ile Asp Ala Asp Thr Pro Pro
            820                 825                 830
Arg Phe His Leu Tyr Tyr Thr Val Val Ala Ser Asp Arg Cys Ser Thr
        835                 840                 845
Glu Asp Pro Ala Asp Cys Pro Pro Asp Pro Thr Tyr Trp Glu Thr Glu
    850                 855                 860
Gly Asn Ile Thr Ile His Ile Thr Asp Thr Asn Asn Lys Val Pro Gln
865                 870                 875                 880
Ala Glu Thr Thr Lys Phe Asp Thr Val Val Tyr Ile Tyr Glu Asn Ala
                885                 890                 895
Thr His Leu Asp Glu Val Val Thr Leu Ile Ala Ser Asp Leu Asp Arg
            900                 905                 910
Asp Glu Ile Tyr His Thr Val Ser Tyr Val Ile Ile Asn Tyr Ala Val
        915                 920                 925
Asn Pro Arg Leu Met Asn Phe Phe Ser Val Asn Arg Glu Thr Gly Leu
    930                 935                 940
Val Tyr Val Asp Tyr Glu Thr Gln Gly Ser Gly Glu Val Leu Asp Arg
945                 950                 955                 960
Asp Gly Asp Glu Pro Thr His Arg Ile Phe Phe Asn Leu Ile Asp Asn
                965                 970                 975
Phe Met Gly Glu Gly Glu Gly Asn Arg Asn Gln Asn Asp Thr Glu Val
            980                 985                 990
Leu Val Ile Leu Leu Asp Val Asn Asp Asn Ala Pro Glu Leu Pro Pro
        995                 1000                1005
Pro Ser Glu Leu Ser Trp Thr Ile Ser Glu Asn Leu Lys Gln Gly Val
    1010                1015                1020
Arg Leu Glu Pro His Ile Phe Ala Pro Asp Arg Asp Glu Pro Asp Thr
1025                1030                1035                1040
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Asp Asn Ser Arg Val Gly Tyr Glu Ile Leu Asn Leu Ser Thr Glu Arg
                1045                1050                1055
Asp Ile Glu Val Pro Glu Leu Phe Val Met Ile Gln Ile Ala Asn Val
            1060                1065                1070
Thr Gly Glu Leu Glu Thr Ala Met Asp Leu Lys Gly Tyr Trp Gly Thr
        1075                1080                1085
Tyr Ala Ile His Ile Arg Ala Phe Asp His Gly Ile Pro Gln Met Ser
    1090                1095                1100
Met Asn Glu Thr Tyr Glu Leu Ile Ile His Pro Phe Asn Tyr Tyr Ala
1105                1110                1115                1120
Pro Glu Phe Val Phe Pro Thr Asn Asp Ala Val Ile Arg Leu Ala Arg
                1125                1130                1135
Glu Arg Ala Val Ile Asn Gly Val Leu Ala Thr Val Asn Gly Glu Phe
            1140                1145                1150
Leu Glu Arg Ile Ser Ala Thr Asp Pro Asp Gly Leu His Ala Gly Val
        1155                1160                1165
Val Thr Phe Gln Val Val Gly Asp Glu Glu Ser Gln Arg Tyr Phe Gln
    1170                1175                1180
Val Val Asn Asp Gly Glu Asn Leu Gly Ser Leu Arg Leu Leu Gln Ala
1185                1190                1195                1200
Val Pro Glu Glu Ile Arg Glu Phe Arg Ile Thr Ile Arg Ala Thr Asp
                1205                1210                1215
Gln Gly Thr Asp Pro Gly Pro Leu Ser Thr Asp Met Thr Phe Arg Val
            1220                1225                1230
Val Phe Val Pro Thr Gln Gly Glu Pro Arg Phe Ala Ser Ser Glu His
        1235                1240                1245
Ala Val Ala Phe Ile Glu Lys Ser Ala Gly Met Glu Glu Ser His Gln
    1250                1255                1260
Leu Pro Leu Ala Gln Asp Ile Lys Asn His Leu Cys Glu Asp Asp Cys
1265                1270                1275                1280
His Ser Ile Tyr Tyr Arg Ile Ile Asp Gly Asn Ser Glu Gly His Phe
                1285                1290                1295
Gly Leu Asp Pro Val Arg Asn Arg Leu Phe Leu Lys Lys Glu Leu Ile
            1300                1305                1310
Arg Glu Gln Ser Ala Ser His Thr Leu Gln Val Ala Ala Ser Asn Ser
        1315                1320                1325
Pro Asp Gly Gly Ile Pro Leu Pro Ala Ser Ile Leu Thr Val Thr Val
    1330                1335                1340
Thr Val Arg Glu Ala Asp Pro Arg Pro Val Phe Val Arg Glu Leu Tyr
1345                1350                1355                1360
Thr Ala Gly Ile Ser Thr Ala Asp Ser Ile Gly Arg Glu Leu Leu Arg
                1365                1370                1375
Leu His Ala Thr Gln Ser Glu Gly Ser Ala Ile Thr Tyr Ala Ile Asp
            1380                1385                1390
Tyr Asp Thr Met Val Val Asp Pro Ser Leu Glu Ala Val Arg Gln Ser
        1395                1400                1405
Ala Phe Val Leu Asn Ala Gln Thr Gly Val Leu Thr Leu Asn Ile Gln
    1410                1415                1420
Pro Thr Ala Thr Met His Gly Leu Phe Lys Phe Glu Val Thr Ala Thr
1425                1430                1435                1440
Asp Thr Ala Gly Ala Gln Asp Arg Thr Asp Val Thr Val Tyr Val Val
                1445                1450                1455
Ser Ser Gln Asn Arg Val Tyr Phe Val Phe Val Asn Thr Leu Gln Gln
            1460                1465                1470
Val Glu Asp Asn Arg Asp Phe Ile Ala Asp Thr Phe Ser Ala Gly Phe
        1475                1480                1485
Asn Met Thr Cys Asn Ile Asp Gln Val Val Pro Ala Asn Asp Pro Val
    1490                1495                1500
Thr Gly Val Ala Leu Glu His Ser Thr Gln Met Arg Gly His Phe Ile
1505                1510                1515                1520
Arg Asp Asn Val Pro Val Leu Ala Asp Glu Ile Glu Gln Ile Arg Ser
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                1525                1530                1535
Asp Leu Val Leu Leu Ser Ser Ile Gln Thr Thr Leu Ala Ala Arg Ser
            1540                1545                1550
Leu Val Leu Asp Leu Leu Thr Asn Ser Ser Pro Asp Ser Ala Pro Asp
        1555                1560                1565
Ser Ser Leu Thr Val Tyr Val Leu Ala Ser Leu Ser Ala Val Leu Gly
    1570                1575                1580
Phe Met Cys Leu Val Leu Leu Leu Thr Phe Ile Ile Arg Thr Arg Ala
1585                1590                1595                1600
Leu Asn Arg Arg Leu Glu Ala Leu Ser Met Thr Lys Tyr Gly Ser Leu
                1605                1610                1615
Asp Ser Gly Leu Asn Arg Ala Gly Ile Ala Ala Pro Gly Thr Asn Lys
            1620                1625                1630
His Thr Val Glu Gly Ser Asn Pro Ile Phe Asn Glu Ala Ile Lys Thr
        1635                1640                1645
Pro Asp Leu Asp Ala Ile Ser Glu Gly Ser Asn Asp Ser Asp Leu Ile
    1650                1655                1660
Gly Ile Glu Asp Leu Pro His Phe Gly Asn Val Phe Met Asp Pro Glu
1665                1670                1675                1680
Val Asn Glu Lys Ala Asn Gly Tyr Pro Glu Val Ala Asn His Asn Asn
                1685                1690                1695
Asn Phe Ala Phe Asn Pro Thr Pro Phe Ser Pro Glu Phe Val Asn Gly
            1700                1705                1710
Gln Phe Arg Lys Ile
        1715
```